



National FFA Career Development Events

*A Special Project of the
National FFA Foundation*

National FFA Career Development Events

General Information

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These are the official rules and regulations for National FFA Career Development Events for 2012-2016. Refer to the CDE webpage on ffa.org for the most up-to-date edition of the career development event handbook.

Prepared and published by the National FFA Organization. The National FFA Organization is a resource and support organization that does not select, control or supervise state association, local chapter or individual member activities except as expressly provided for in the National FFA Organization Constitution and Bylaws. The National FFA Organization affirms its belief in the value of all human beings and seeks diversity in its membership, leadership and staff.

FFA makes a positive difference in the lives of students by developing their potential for premier leadership, personal growth and career success through agricultural education. National FFA Online, www.ffa.org, FFA's Internet web site, can provide information about the National FFA Organization.

Philosophy of National FFA Career Development Events

The National FFA Organization is dedicated to organizing experiences that will meet the future needs of students while accomplishing the current purposes of agricultural education. The primary goal of career development events is to develop individual responsibilities, foster teamwork and promote communication while recognizing the value of ethical competition and individual achievement.

The activities in each career development event:

- include problem solving, critical thinking and teamwork skills, where appropriate.
- encourage appreciation for diversity by reducing barriers to participation among members.
- develop general leadership and recognize individual and team achievement.
- promote concentrated focus on future needs of members and society.

The National FFA Organization assumes the leadership role in developing and continuously improving relevant FFA career development events. National career development events should reflect instruction that currently takes place in the entire agricultural education program, including classroom instruction, laboratory instruction, individualized instruction and/or supervised agricultural experience. Career development events and awards are intended to be an outgrowth of instruction. Also, it is appropriate for the national organization to develop career development events and awards that stimulate instruction in emerging areas that reflect both current and future community, national and global work force needs. National FFA Career Development Events should be developed with significant input from FFA members, teachers, partners, respective industry sponsors and others involved in agricultural education. The National FFA Organization continues to encourage accessibility and provide opportunities for achievement and recognition for students with diverse backgrounds.

Career development events that include team activities should be based on cooperation and teamwork while recognizing the value of competition and individual achievement. Where appropriate, team activities will be included that require two or more members from one chapter working cooperatively.

Agriculture, Food and Natural Resources (AFNR) Career Cluster Content Standards

Agriculture is a highly technical and ever-changing industry upon which everyone is dependent. In order to maintain agriculture as the nation's number one industry, it is crucial to understand the importance of agrisciences, marketing strategies, safe food production and continuous research. Strong, relevant agriscience programs are one way to can maintain the nation's agricultural edge.

The National AFNR Career Cluster Content Standards were developed as part of the National FFA 10 x 15 project to provide state agricultural education leaders and teachers with a forward-thinking guide for what students should know and be able to do through the study of agriculture. The National AFNR Career Cluster Content Standards should be used as a guide to develop well-planned curriculum in agriscience education to be delivered to students throughout the country. For a complete copy of the AFNR Career Cluster Content Standards please visit www.agedlearning.org.

National FFA Organization has adopted the AFNR Career Cluster Content Standards and integrated them into all national award and recognition programs for the benefit of the members, school administration and agriculture as a whole. Details outlining the incorporation of the standards in career development events can be found at the end of each event chapter in the CDE handbook.

Official CDE Rules and Policies – 2012-2016

General Rules

Violations of any of the following rules may be grounds for the event superintendent to disqualify the participants. National FFA staff and event superintendents will use the published rules and procedures to organize and implement the National FFA Career Development Events. Event activities may not be conducted due to lack of necessary materials, expertise or extreme impact to event budgets. Teams that are certified to compete will receive the current event format in a team orientation packet prior to the convention.

Official Dress Recommendations, Number of Participants and Number of Scores for Team Total

Event	Official Dress Appropriate	Number of Participants Allowed (per team)	Number of Scores Counted for Team Score
Agricultural Communications	Yes	3	3
Agricultural Issues Forum	Optional	3-7	Team Score Event
Agricultural Technology and Mechanical Systems	No	4	Top 3 Scores
Agricultural Sales	Yes	4	4
Agronomy	Yes	4	4
Creed Speaking	Yes	1	N/A
Dairy Cattle Management and Evaluation	Yes	4	4
Dairy Cattle Handlers	Yes	1	N/A
Environmental and Natural Resources	No	4	4
Extemporaneous Public Speaking	Yes	1	N/A
Farm Business Management	Yes	4	Top 3 Scores
Floriculture	Yes	4	4
Food Science and Technology	Yes	4	4
Forestry	No	4	4
Horse Evaluation	Yes	4	Top 3 Scores
Job Interview	Yes	1	N/A
Livestock Evaluation	Yes	4	4
Marketing Plan	Yes	3	Team Score Event
Meats Evaluation and Technology	No	4	Top 3 Scores
Milk Quality and Products	Yes	4	4
Nursery/Landscape	Yes	4	Top 3 Scores
Parliamentary Procedure	Yes	6	Team Score Event
Poultry Evaluation	Yes	4	Top 3 Scores
Prepared Public Speaking	Yes	1	N/A
Veterinary Science	No	4	4

Eligibility of Participants

- A. Each participant must be a current, bona fide, dues paying FFA member in good standing with the local chapter, state FFA association and the National FFA Organization during the school year which the participant qualified to participate at the national level.
 - 1. In the event a participant's name is not on the chapter's official roster for the years in which the dues were payable to the National FFA Organization, a past due membership processing fee, in addition to the dues, must be paid prior to the national event.
 - 2. National FFA membership staff will set the processing fee amount annually.
- B. The participant, at the national event, must:
 - 1. Be a high school FFA member; high school refers to grades 9-12. (A graduating senior is considered eligible to compete in state and national career development events up to and including his/her first national convention following graduation.)
 - 2. Have qualified as a 7th, 8th or 9th grade member to participate in the Creed speaking event.
 - 3. While in high school, be enrolled in at least one agricultural education course during the school year and/or follow a planned course of study; either course must include a supervised agricultural experience program, the objective of which is preparation for an agricultural career.
 - 4. If a student moves to a different chapter or a different state once a he/she has qualified as a state representative in a career development event, that student may be allowed to compete in the national event with the school he/she qualified with during the qualifying year.
- C. A student may not participate more than once in the same official National FFA Career Development Event.
- D. No student may participate in more than one National FFA Career Development Event each year.
- E. Each member participating in a National FFA Career Development Event must submit the proper *Waiver, Release of Liability and Consent to Medical Treatment Form* prior to start of event.

Selection and Certification of State Teams

- A. Each state will submit a team declaration form by **June 1** prior to the national FFA convention. An entry processing fee will be charged for participation in each declared event with the exception of the dairy cattle handlers activity.
- B. Each team will be composed of the number of members determined by the specific event rules and formats. The members of a state team must be from the same chapter. Members must qualify in the career development event in which they are to participate at the national level. Teams must be selected at a state or interstate career development event held between the immediate previous national FFA convention and prior to the national FFA convention in which they are participating. States that qualify more than one year out must request and submit a written waiver for approval by the certification deadline.
 - 1. Online certification deadline: **September 15**.
 - 2. Online add/delete deadline: **Tuesday before convention at noon (Eastern)**.
- C. With extenuating circumstances a teacher may substitute another student from the chapter who may not have participated at a state qualifying event, with the exception of Creed speaking, dairy handlers activity, extemporaneous public speaking, job interview and prepared public speaking, which must be submitted and approved by state staff.

- D. The state supervisor of agricultural education or the executive secretary must certify that participants are eligible. If an ineligible student participates in any career development event, the member will be disqualified and may result in the disqualification of the team as well.
- E. All students must be certified online by the designated deadline. Once original certification has been completed, no member may be added without first deleting a member.
- F. The national organization will certify National FFA Career Development Event winners for international competition when states request, with the understanding that the state team will provide their own travel expenses.

Emergency Conditions

Under emergency conditions a state team participating in a National FFA Career Development Event may be made up of less than the required members. States must still certify teams prior to the national FFA convention, but fewer than the required members could compete if an emergency condition such as illness, death in the family or an act of God would occur. Those individuals competing would still be eligible to qualify for individual awards, if applicable.

Disqualification

- A. Any communication, verbal or non-verbal, between participants during a career development event will be sufficient cause to eliminate the team member involved from the career development event. The only exception to this would be communications between team members during the team activity portion of a given career development event.
- B. Teams or participants arriving after the career development event has begun may be disqualified or penalized.
- C. Any assistance given to a team member from any source other than the career development event officials or assistants will be sufficient cause to eliminate the team from the career development event.
- D. Event superintendents may stop any participant if they deem their manner to be hazardous either to themselves or others. Such action shall deem the individuals disqualified for that section of the career development event.
- E. Participants who start an event and do not complete the event without notifying event officials at the time of departure will be disqualified. This can affect the overall team rank and position. In some events this will also disqualify the entire team.
- F. Participants will not be allowed to utilize personal electronic communication devices, other than those approved by the event officials, during the entire course of the event. Participants who access personal electronic communication devices without prior approval of the event officials will be disqualified.
- G. No participant shall gain access to real materials that will be utilized by the event committee during competition. Any team, participant, advisor or coach reported and proven to do so will be disqualified from the national event.

Additions/Deletions of National Events

- A. National FFA staff is expected to be proactive in developing new or initiating changes within existing career development events to ensure that they meet the needs of FFA members.
- B. If fifteen (15) state supervisors/executive secretaries develop a proposal for a new career development event, the national FFA staff will conduct a study for the validity of the career development event and make a recommendation to the chief executive officer. Representatives of these states must be from each of the FFA regions. The same process may be used to eliminate a national career development event.
- C. Three years following the initiation of a new career development event, at least fifteen (15) states should be participating. After the next three-year period, at least twenty-six (26) states should be participating in order to retain the event at the national level.

Rules Committee/Scoring Appeals Process

- A. If a written appeal is filed within the seven (7) calendar days after results announcement, national CDE staff will review the appeal. Upon receiving input from team leader and division director, national CDE staff will accept or deny the appeal. The national CDE staff's recommendation will be shared with appeals committee and National FFA Chief Executive Officer for further input, if necessary.
 1. The written appeal must be filed with the Education Division staff responsible for scoring career development events within seven (7) calendar days of the results announcement and accompanied by a \$50 filing fee. The fee will be returned if the appeal is justified.
- B. The appeals committee will be chaired by the National FFA Awards, Recognition and Career Development Events Advisory Committee chairperson who will in turn appoint a representative of each of the following organizations: National Association of Supervisors of Agricultural Education (NASAE), National Association of Agricultural Educators (NAAE) and the American Association for Agricultural Education (AAAE). The National FFA staff responsible for career development events will also serve on the committee.

Waiver of FFA Rules

Any local chapter seeking a waiver of a National FFA policy or procedure must submit in writing to the chapter's state FFA association office. If the request is approved at the state level, it must be forwarded, under the signature of the state advisor or executive secretary, to the career development events education specialist. After study by the appropriate FFA staff, a recommendation to grant or deny the appeal will be forward to the chief executive officer for his/her approval. The request must be submitted to the national FFA staff at least 30 days prior to the scheduled event or due date for which the waiver is requested. This policy does not supersede any current FFA policy for appeals already established for a particular FFA program.

Selection of CDE Superintendents and CDE Committee Members

- A. Nominations for CDE superintendents may come to National FFA staff from the following sources:
 - 1. standing CDE superintendent
 - 2. current CDE committee members
 - 3. state leadership
 - 4. Team Ag Ed partners
- B. CDE superintendents will be selected by national CDE staff and approved by the National FFA Chief Executive Officer.
- C. Each CDE superintendent will serve a three to five year term. At the end of the superintendent's term, a qualified replacement will assume the duties of superintendent.
- D. National FFA staff and CDE superintendents will select qualified individuals to serve on CDE committees. Selection of committee members will be based on:
 - 1. individual qualifications.
 - 2. recommendations from state leaders, current CDE committee members, CDE superintendents or National FFA staff.
 - 3. recommendations from Team Ag Ed partners.
 - 4. current rotational procedures developed by each CDE committee.
 - 5. provide diversity for the committee.
 - 6. commitment to serve a minimum of three years on the committee.
- E. Final approval of new committee members is the responsibility of the National FFA CDE staff with input and recommendations from CDE event superintendent and committee.

Sanctioning Events

Sanctioning of non-national FFA competitive events (those competitive events conducted by organizations other than the National FFA Organization) as National FFA Career Development Events should occur when:

- 1. The highest quality event possible is conducted.
- 2. Organization conducting event and National FFA Organization agree that event can and should be sanctioned.
- 3. Event is recommended by the National FFA Staff responsible for CDEs with input and agreement from the Award and Recognition Advisory Committee and approved by the National FFA Chief Executive Officer.
- 4. National FFA is represented by staff responsible for career development events on the planning and implementation committee for each event.
- 5. Winners of the national sanctioned event will be recognized in the same manner as national career development events winners are currently recognized.

Official Dress

Participants are expected to observe the National FFA Code of Ethics and the proper use of the FFA jacket during career development events. (Please reference the latest edition of the Official FFA Manual.) Official FFA dress is highly recommended for all participants where appropriate and is required for the awards presentation and recognition.

Accessibility for All Students

All special needs requests and appropriate documentation as outlined in the special needs request policy must be submitted at time of certification.

- 1. Special needs policy is posted on the CDE program page at www.ffa.org/cde
- 2. Special needs request due: **August 15**

Written Document Penalties

A penalty of 10% of the total points allotted will be assessed for the written documents received after the postmarked deadline. If the document is still not received seven days after the postmarked deadline, the team/individual may be subject to disqualification.

1. National staff will mark late entries as such.
2. Event officials will be notified of late entries at the time written documents are provided for judging.
3. Event superintendent will ensure that penalty is applied.

National FFA Veterinary Science Career Development Event

A Special Project of the National FFA Foundation

Important Note

Please thoroughly read the Introduction Section at the beginning of this handbook for complete rules and procedures that are relevant to all National FFA Career Development Events.

I. Purpose

The purpose of the veterinary science career development event is to promote college and career readiness by providing opportunities to develop technical knowledge and demonstrate practical skills in the field of veterinary science.

II. Objectives

- A. Participants will demonstrate professional ethics, decision-making, communication and problem-solving skills.
- B. Participants will demonstrate technical competency with small and large animals in the areas of:
 1. Anatomy and physiology
 2. Clinical procedures
 3. Identification
 4. Health and safety
 5. Medical terminology

III. Agriculture, Food and Natural Resources (AFNR) Career Cluster Content Standards

With the recommendation of the National FFA Board of Directors, all national FFA programs have incorporated these standards to guide the direction and content of program materials and activities. Refer to Appendix A in this chapter of the handbook for a complete list of the measurable activities that participants will carry out in this event. For details about the incorporation of AFNR standards, refer to the Introduction chapter of the CDE handbook.

IV. Event Rules

- A. Teams will consist of four members with all four members' scores counting toward total team score.
- B. Dress code:
 1. Day 1: It is highly recommended that participants wear FFA Official Dress for the written portion of the event.
 2. Day 2: All participants must wear either scrubs (top and bottoms; solid color) or polo with slacks. All participants must wear closed toe, closed heel and flat shoes (no clogs, sandals or flip-flops). No jewelry may be worn on the second day of this event. This includes rings, bracelets, earrings and exposed body piercing. Wrist watches are permitted.

3. Tools and Equipment:
 - a. Equipment provided: pencils, calculators, clipboards and paper.
 - b. National FFA will provide the specific tools and equipment needed to complete practicums.
 - c. Due to sanitation reasons, some items that may be needed in the event (such as stethoscopes) will need to be provided by the participant or their chapter. Teams will be provided a list of specific items needed for a specific year based on the event activities.
4. Any participant in possession of an electronic device in the event area is subject to disqualification.

V. Event Format

A. Individual Activities

1. Written Exam - 100 points

The objective, multiple-choice exam is designed to determine team members' broad understanding of the veterinary science field. The written exam will consist of 50 multiple-choice questions. See sample questions below. Sixty minutes will be given for the exam. Topics for the exam may include:

- Behavior
- Disease (causes and sources, signs and symptoms)
- Medical terminology
- Medical records
- Anatomy/physiology
- Regulations (federal OSHA, MSDS)
- Patient management
- Facility management
- Genetics

Sample Written Exam Questions

Which of the following is the intermediate host for the dog tapeworm?

- A. Mosquito
- B. Rodent
- C. **Flea**
- D. Tick

What is the primary body defense against bacteria that may cause disease?

- A. **Skin**
- B. Antibiotics
- C. Antigens
- D. Lymph nodes

What route of administration deposits a drug into the blood vessel?

- A. **Intravenous**
- B. Intracardiac
- C. Intraperitoneal
- D. Intradermal

2. Scenario Questions - 50 points per scenario (100 points total)
The questions associated with the scenarios will allow students to utilize critical thinking and problem-solving skills. Fifty minutes total will be allowed to complete both scenario questions. Participants will be given two scenarios based on the topic rotation listed below.
- 2013 and 2017: Clinical/wellness
 - 2014: Communication/customer education
 - 2015: Behavior/husbandry
 - 2016: Future of veterinary profession and welfare/ethics

Sample Scenario Question

Write a persuasive letter on the issue below to portray your point of view using the provided resource.

In 2006 a nationwide ruling was established banning the slaughter of horses. Since the ruling there have been serious growing concerns with the welfare and high number of unwanted/neglected horses in the United States. Currently several states are considering reversing the 2006 ban. What are the pros and cons of the original ban and the proposal to reverse it?

Resource: http://www.avma.org/issues/animal_welfare/unwanted_horses_faq.asp

3. Identification - 100 points total
Participants will identify equipment, parasites and breeds/species for a total of 100 points (2 points per item). Fifty minutes will be given for this activity. Identification lists are located at the end of this handbook.
- a. Equipment – 50 points
Participants will identify pieces of equipment (actual equipment and photos). They will also need to have general knowledge about the use for each item.
 - b. Parasites – 30 points
Participants will identify parasites (photos) and explain the life cycles of selected parasites.
 - c. Breeds – 20 points
Participants will identify breeds of small and large animals (photos).
4. Practicums - 300 points total
- a. Math Applications Practicum – 100 points
The number of practicum questions will vary based on the type of activity that is assigned. Participants will have 30 minutes to complete the entire math application practicum. Questions may include conversions, dose calculations, dilutions, cost calculations and invoices.
- Example:*
Sophie, a golden retriever, and her owner have just moved from out-of-state and are reestablishing veterinarian relations at your clinic. Sophie's owner has provided you with her health records from their previous veterinarian. Sophie had been prescribed a diet plan by the previous veterinarian and had been coming into the clinic for weekly weight checks. Sophie's owner would like to continue the weekly checks with you. You weigh Sophie and record her weight as 19 kg. The owner would like you to tell her how much weight Sophie has lost. Sophie's last recorded weight was 43.2 lb. How many pounds did Sophie lose since the last weighing? ANSWER: Sophie has lost 1.4 lb. since the last recorded weighing.

- b. **Handling and Restraining Practicum – 100 points**
Participants will be given four handling/restraint activities to complete (25 points each). Fifteen to thirty minutes will be allotted for this section depending on the activities selected each year. Participants are expected to talk through the handling and restraining steps to a judge as they are being scored. Judges may speak and ask questions to the participant at the end of each activity, if time allows. All handling and restraining scorecards can be found at the end of this handbook.
- c. **Clinical Procedure Practicum – 100 points**
Participants will be given four clinical procedure activities to complete (25 points each). Fifteen to thirty minutes will be allotted for this section depending on the activities selected each year. Participants are expected to talk through the clinical procedure steps to a judge as they are being scored. Judges may speak and ask questions to the participant at the end of each activity, if time allows. All clinical procedure scorecards can be found at the end of this handbook.

B. Team Activity - 600 points

Teams will conduct research using local veterinarians and veterinary resources based on the annual topic. In a 15 minute presentation, teams will demonstrate the different roles of the veterinary team, as well as explain steps and procedures for the veterinary process to the judges. Judges will be allotted five minutes of question/answer time after each presentation. The potential roles to be addressed in the team activity are listed below. Teams need to determine what roles are most important to demonstrate based on the annual topic. Veterinary team roles may include, but are not limited to:

- Veterinary technician
- Veterinarian
- Veterinary assistant
- Receptionist
- Farm manager
- Owner/client
- Kennel/stable assistant

The presentation can be creative in nature and teams may include props, but must be able to set up in 5 minutes and tear down in 3 minutes. PowerPoint presentations will not be utilized in the team activity. See team activity rubric at the end of this handbook.

Annual team activity topics:

- 2013: Adult feline wellness visit
- 2014: Horse with equine colic
- 2015: Senior dog wellness visit
- 2016: Cow with salmonellosis
- 2017: Dairy goat with caprine arthritis encephalitis (CAE)

VI. Event Scoring

Day 1 Events:	Individual Points	Team Points
Written Exam	100 (2 pts/question)	400
Scenario Questions	100 (50 pts/scenario)	400
Identification	100	400
Math Application Practicum	100	400
Day 2 Events:		
Handling and Restraining Practicum	100 (25 pts/activity)	400
Clinical Procedures Practicum	100 (25 pts/activity)	400
Team Activity		600
Maximum Total Points:	600	3,000

VII. Tiebreakers

- A. Team tiebreakers will be settled in the following order:
1. Combined individual practicum total score
 2. Combined individual written exam total score
- B. Individuals tiebreakers will be settled in the following order:
1. Combined practicum score
 2. Written exam score

VIII. Awards

Awards will be presented to individuals and teams based upon their rankings at the awards ceremony. Awards are sponsored by a cooperating industry sponsor(s) as a special project, and/or by the general fund of the National FFA Foundation.

IX. Resources

This list of references is not intended to be all inclusive. Other sources may be utilized, and teachers are encouraged to make use of the very best instructional materials available. The following list contains references that may prove helpful during event preparation.

Books

Veterinary Assisting: Fundamentals and Applications. Vanhorn, Clark. ISBN: 978-1-4354-5387-6

McCurnin's Clinical Textbook for Veterinary Technicians. McCurnin, Bassert. ISBN: 978-1416057000

Small Animal Surgical Nursing: Skills and Concepts. Busch. ISBN: 978-0323030632

Large Animal Clinical Procedures for Veterinary Technicians. Holtgrew-Bohling. ISBN: 978-0-323-07732-3

Manual of Clinical Procedures in Dogs, Cats, Rabbits & Rodents. Crow, Walshaw, Boyle. ISBN: 978-0813813042

Restraint and Handling for Veterinary Technicians and Assistants. Ballard, Rockett. ISBN: 978-1-4354-5358-6

Small Animal Care and Management. Warren. ISBN: 978-1-4180-4105-2

Exotic Animal Care and Management. Judah, Nuttall. ISBN: 978-1-4180-4198-4

An Illustrated Guide to Veterinary Medical Terminology. Romich. ISBN: 978-1-4354-2012-0

Veterinary Instruments and Equipment: A Pocket Guide. Sonsthagen. ISBN: 978-0323032032

Official Guide: Maintaining and Cleaning Surgical Instruments. Stow.

- Provided free of charge by the program or available on-line at:
<http://www.spectrumsurgical.com>

Veterinary Science: Preparatory Training for the Veterinary Assistant. Faries. ISBN: 978-0-9849115-0-9.

- Order online: https://agrilifebookstore.org/publications_browse2.cfm?keywordid=4

Websites

American Kennel Club – <http://www.akc.org/index.cfm>

Cat Fanciers' Association – <http://www.cfa.org/client/breeds.aspx>

American Rabbit Breeders Association – <http://www.arba.net/>

OSHA – <http://www.safetyvet.com/osha/oshamain.htm>

Equipment and Materials Identification List - Page 1

100. Ambubag
101. Anesthetic machines
102. Animal clippers
103. Autoclave
104. Autoclave tape indicator
105. Backhaus towel clamps
106. Balling gun
107. Bands (castration or docking)
108. Bandaging material- Elasticon
109. Bandaging material- roll gauze
110. Bandaging material- vet wrap
111. Basket muzzle
112. Betadine
113. Brush - Body (soft bristle)
114. Brush - Dandy (stiff bristle)
115. Brush - Slicker
116. Brush - Pin
117. Bulb syringe
118. Cat bag
119. Carmalt
120. Catch pole (dog snare)
121. Catheter - IV
122. Catheter - butterfly
123. Catheter - urine
124. Centrifuge
125. Chain twitch
126. Chemical indicator strips
127. Clipper blades
128. Clipper comb
129. Surgical drapes
130. Cold sterile tray
131. Comb - Curry
132. Comb - Flea
133. Comb - Scotch
134. Cover slips
135. Dehorner - Barnes
136. Dehorner - electric
137. Dehorner - scoop or tube
138. Dental floats
139. Dental retractor
140. Dental scaler
141. Disposable hypodermic needles
142. Drench gun
143. Ear notcher
144. Ear tags
145. Ear tag pliers
146. Elastrator
147. Elizabethian collar
148. Emasculators
149. Endotracheal tubes
150. Fecal loop
151. Fecalyzers
152. Feeding tube for small animals
153. Fetal extractor
154. Fingertip toothbrush
155. Forceps- Adson tissue
156. Forceps - Alligator
157. Forceps- Allis tissue
158. Forceps- Babcock tissue
159. Forceps- Brown-Adson thumb
160. Forceps- Crile
161. Forceps- Halstead mosquito hemostatic
162. Forceps- Kelly
163. Forceps - Rat tooth thumb
164. Gag mouth speculum (small)
165. Gag mouth speculum (large)
166. Gavage needle
167. Gravity feeder / J tube
168. Halter
169. Head chute
170. Hog snare
171. Hoof knife
172. Hoof nippers
173. Hoof pick
174. Hoof rasp
175. Hoof trimmers
176. Humane twitch
177. Hydraulic chute
178. Identification tag applicator
179. IV fluids
180. IV administration
181. Laryngoscopes

Equipment and Materials Identification List - Page 2

- | | |
|--|--|
| 182. Lead rope | 205. Shedding blade |
| 183. Lead shank | 206. Silver nitrate sticks |
| 184. Needle holder - Mayo-Hegar | 207. Small animal oxygen cage |
| 185. Needle holder - Olsen-Hegar | 208. Snook ovariohysterectomy hook |
| 186. Microscope slides | 209. Squeeze chute |
| 187. Muzzle- commercial | 210. Staple remover |
| 188. Nail clippers - guillotine | 211. Steel lift table |
| 189. Nail clippers - plier | 212. Stethoscope |
| 190. Obstetrical chain and handle | 213. Surgical cap |
| 191. Ophthalmoscope | 214. Surgical gloves |
| 192. Otoscope | 215. Surgical gown |
| 193. Paste gun | 216. Surgical masks |
| 194. Pig tooth nippers | 217. Surgical tray |
| 195. Pill counting tray | 218. Suture materials |
| 196. Radiology personal protective equipment | 219. Suture needle |
| 197. Rumen magnet | 220. Suture wire cutting scissors |
| 198. Scalpel blade | 221. Syringe - leur lock |
| 199. Scalpel handle | 222. Syringe - slip tip |
| 200. Scissors- Bandage | 223. Syringe - automatic, multi-dose |
| 201. Scissors- Lister bandage | 224. Tattooing instruments - small & large |
| 202. Scissors- Littauer suture removal | 225. Tourniquet |
| 203. Scissors- Mayo dissecting | 226. Trocar & cannula |
| 204. Scissors- Metzenbaum dissecting | 227. Weight tape |

Parasite Identification List

300. **Blowfly** (Family Calliphoridae)
301. **Blowfly Maggot** (Family Calliphoridae)
302. **Cat Warble** (Genus *Cuterebra*)
303. **Cattle Grub** (Genus *Hypoderma*)
304. **Coccidia** (Genus *Isospora* or *Eimeria*)
305. **Demodectic Mite** (Genus *Demodex*)
306. **Ear Mite** (Family Ascaridae; Genus *Otodectes*)
307. **Fleas*** (Genus *Ctenocephalides*)
308. **Flea Larva** (Genus *Ctenocephalides*)
309. **Flea Tapeworm** (Genus *Dipylidium*)
310. **Flea Tapeworm Egg** (Genus *Dipylidium*)
311. **Flea Tapeworm Segment** (Genus *Dipylidium*)
312. **Giardia** (Genus *Giardia*)
313. **Hard Tick** (Family Ixodidae; Genus *Amblyomma* or *Dermacentor*)
314. **Heartworm*** (Genus *Dirofilaria*)
315. **Heartworm Adult*** (Genus *Dirofilaria*)
316. **Heartworm Microfilaria*** (Genus *Dirofilaria*)
317. **Hookworm Adult*** (Family Ancylostomatidae; Genus *Ancylostoma*, *Uncinaria*, *Bunostomum* or *Globocephalus*)
318. **Hookworm Egg*** (Family Ancylostomatidae; Genus *Ancylostoma*, *Uncinaria*, *Bunostomum* or *Globocephalus*)
319. **Horse Bots*** (Genus *Gasterophilus*)
320. **Horse Strongyles*** (Family Strongylidae; Genus *Strongylus*)
321. **Lice - Biting** (Order Mallophaga; Genus *Bovicola* or *Trichodectes*)
322. **Lice - Sucking** (Order Anoplura; Genus *Linognathus* or *Hematopinus*)
323. **Liver Fluke** (Class Trematoda; Genus *Fasciola*, *Fascioloides* or *Dicrocoelium*)
324. **Lungworm** (Family Metastrongylidae; Genus *Metastrongylus*, *Dictyocaulus* or *Aelurostrongylus*)
325. **Mosquito Adult** (Family Culicidae; Genus *Anopheles*, *Culex* or *Aedes*)
326. **Mosquito Larva** (Family Culicidae; Genus *Anopheles*, *Culex* or *Aedes*)
327. **Pinworm** (Genus *Oxyuris*)
328. **Roundworm Adult*** (Family Ascarididae or Toxocaridae; Genus *Toxocara*, *Toxascaris*, *Ascaris*, *Parascaris* or *Neoascaris*)
329. **Roundworm Egg*** (Family Ascarididae or Toxocaridae; Genus *Toxocara*, *Toxascaris*, *Ascaris*, *Parascaris* or *Neoascaris*)
330. **Sarcoptic Mite** (Family Ascaridae; Genus *Sarcoptes* or *Notoedres*)
331. **Taenia Tapeworm*** (Family Taeniidae; Genus *Taenia*)
332. **Taenia Tapeworm Egg*** (Family Taeniidae; Genus *Taenia*)
333. **Taenia Tapeworm Segment*** (Family Taeniidae; Genus *Taenia*)
334. **Soft Tick** (Family Argasidae; Genus *Otobius* or *Argas*)
335. **Whipworm*** (Genus *Trichuris*)
336. **Whipworm Egg*** (Genus *Trichuris*)

*Asterisk indicates which parasite life cycles could have questions.

Breed/Species Identification List

Dogs

SPORTING GROUP

- 400. Brittany
- 401. Cocker Spaniel
- 402. English Setter
- 403. English Springer Spaniel
- 404. German Shorthaired Pointer
- 405. Golden Retriever
- 406. Irish Setter
- 407. Labrador Retriever
- 408. Weimaraner

NON-SPORTING GROUP

- 409. Bichon Frise
- 410. Boston Terrier
- 411. Bulldog
- 412. Chinese Shar-Pei
- 413. Chow Chow
- 414. Dalmatian
- 415. Lhasa Apso
- 416. Poodle

TERRIER GROUP

- 417. Bull Terrier
- 418. Cairn Terrier
- 419. Miniature Schnauzer
- 420. Parson Russell Terrier
- 421. Scottish Terrier
- 422. Smooth Fox Terrier
- 423. West Highland White Terrier
- 424. Wire Fox Terrier

HERDING GROUP

- 425. Australian Cattle Dog
- 426. Australian Shepherd
- 427. Border Collie
- 428. Cardigan Welsh Corgi
- 429. Collie
- 430. German Shepherd Dog
- 431. Old English Sheepdog
- 432. Pembroke Welsh Corgi
- 433. Shetland Sheepdog

WORKING GROUP

- 434. Akita
- 435. Alaskan Malamute
- 436. Bernese Mountain Dog
- 437. Boxer
- 438. Bullmastiff
- 439. Doberman Pinscher
- 440. Giant Schnauzer
- 441. Great Dane
- 442. Great Pyrenees
- 443. Mastiff
- 444. Newfoundland
- 445. Portuguese Water Dog
- 446. Rottweiler
- 447. Saint Bernard
- 448. Samoyed
- 449. Siberian Husky
- 450. Standard Schnauzer

TOY GROUP

- 451. Cavalier King Charles Spaniel
- 452. Chihuahua
- 453. Italian Greyhound
- 454. Maltese
- 455. Miniature Pinscher
- 456. Papillon
- 457. Pekingese
- 458. Pomeranian
- 459. Poodle
- 460. Pug
- 461. Shih Tzu
- 462. Silky Terrier
- 463. Toy Fox Terrier
- 464. Yorkshire Terrier

HOUND GROUP

- 465. Afghan Hound
- 466. American Foxhound
- 467. Basenji
- 468. Basset Hound
- 469. Beagle
- 470. Black and Tan Coonhound
- 471. Bloodhound
- 472. Dachshund
- 473. English Foxhound
- 474. Greyhound
- 475. Whippet

Cats

- 500. Abyssinian
- 501. American Shorthair
- 502. Burmese
- 503. Cornish Rex
- 504. Devon Rex
- 505. Exotic
- 506. Maine Coon
- 507. Manx
- 508. Persian
- 509. Ragdoll
- 510. Russian Blue
- 511. Siamese
- 512. Sphynx
- 513. Turkish Angora

Rabbits

- 514. American Fuzzy Lop
- 515. Angora
- 516. Californian
- 517. Dutch
- 518. Dwarf Hotot
- 519. English Spot
- 520. Flemish Giant
- 521. Jersey Wooly
- 522. Holland Lop
- 523. Netherland Dwarf
- 524. New Zealand
- 525. Polish
- 526. Mini-Rex
- 527. Satin

Birds

- 528. Cockatiel
- 529. Cockatoos
- 530. Love Birds
- 531. Parakeet
- 532. African Gray Parrot
- 533. Canary
- 534. Macaw
- 535. Mynah
- 536. Rainbow Lorikeet
- 537. Society Finch
- 538. Sun Conure
- 539. Zebra Finch

Small Mammals

- 540. Chinchilla
- 541. Degus
- 542. Ferret
- 543. Gerbils
- 544. Guinea Pig
- 545. Hamster
- 546. Hedgehog
- 547. Sugar Glider

Reptiles

- 548. Chameleon
- 549. Gecko
- 550. Iguana
- 551. Lizard
- 552. Bearded Dragon
- 553. Snake
- 554. Turtle
- 556. Frog
- 557. Toad

Poultry

- 558. Chicken- Cornish
- 559. Chicken- Leghorns
- 560. Chicken- Rhode Island Red
- 561. Chicken- Plymouth Rock
- 562. Duck
- 563. Geese
- 564. Quail
- 565. Turkey

Other

- 566. Potbellied Pig

Dairy Cattle

- 600. Ayrshire
- 601. Brown Swiss
- 602. Guernsey
- 603. Holstein
- 604. Jersey

Beef Cattle

- 605. Angus
- 606. Brahman
- 607. Charolais
- 608. Hereford
- 609. Simmental
- 610. Shorthorn

Swine

- 611. American Landrace
- 612. Berkshire
- 613. Chester White
- 614. Duroc
- 615. Hampshire
- 616. Yorkshire

Horse

- 617. Appaloosa
- 618. Arabian
- 619. Belgian
- 620. Clydesdale
- 621. Haflinger
- 622. Miniature
- 623. Morgan
- 624. Paint
- 625. Paso Fino
- 626. Percheron
- 627. Quarter Horse
- 628. Saddlebred
- 629. Standardbred (w/cart)
- 630. Tennessee Walking Horse
- 631. Thoroughbred
- 632. Donkey
- 633. Mule
- 634. Henny

Goat

- 635. Alpine
- 636. Nubian
- 637. Angora
- 638. Boer
- 639. LaMancha
- 640. Oberhasli
- 641. Pygmy
- 642. Saanen
- 643. Toggenburg

Sheep

- 644. Angora
- 645. Cheviot
- 646. Columbia
- 647. Dorset
- 648. Hampshire
- 649. Jacob
- 650. Merino
- 651. Montendale
- 652. Rambouillet
- 653. Southdown
- 654. Suffolk

**Veterinary Science
Handling and Restraining Practicum**

Using a Cat Bag

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student obtains the cat bag and unzips the top all the way open.	4	
2. The student scruffs the cat and lifts it into the bag in one swift motion.	5	
3. The student wraps the Velcro strap around the cat's neck and immediately zips up the bag.	5	
4. The student uses the proper zippered opening to expose the front limb.	5	
5. To remove the cat, the student removes the Velcro strap first, then unzips the bag and removes the cat.	6	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Carrying a Cat

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student ensures that the cat is calm and happy.	6	
2. The student places one hand on the front of the cat's body to control the head and front limbs.	7	
3. The student places his/her other hand under the abdomen and rump to control the rear limbs.	6	
4. The student pulls the cat close to their body for support.	6	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Restraint of the Cat for Cephalic Venipuncture

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student places the cat in sternal recumbency on an examination table.	6	
2. The student scruffs the cat with his/her right hand and extends the left front limb forward, i.e., grasping the elbow in the palm of his/her hand with thumb on the top of the elbow joint.	7	
3. The student allows the judge to grasp the left front paw and extend the limb toward him/her.	6	
4. The student occludes the vein by pressing down on the top of the elbow joint with his/her thumb and then rotating his/her thumb laterally.	6	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Restraint of the Cat for Jugular Venipuncture

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student places the cat in sternal recumbency with its chest close to the edge of the table.	5	
2. The student holds the head up, away from the chest; this can be achieved by cupping a hand underneath the jaw and pushing the head toward the ceiling.	5	
3. The student's other hand grasps the front legs and extends them down off the edge of the table.	5	
4. The student cradles the cat's body close to his/her chest.	5	
5. The student spoke to the patient in a calm and affectionate manner during the procedure.	5	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Applying a Cat Muzzle

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student places the cat in sitting or sternal position on exam table.	4	
2. The student obtains a muzzle of appropriate size for the cat.	3	
3. The student positions the muzzle properly in his/her hands.	3	
4. The student approaches the cat from behind with the muzzle in both hands.	5	
5. The student brings the muzzle up to the cat's face in one swift motion.	5	
6. The student secures the muzzle.	5	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Removing a Cat from a Cage

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student opens the cage door and calls the cat by name.	5	
2. The student scruffs the cat with one hand and lifts it up.	5	
3. The student cradles the cat's abdomen with their other hand and removes the cat from the cage.	5	
4. With the cat still scruffed, the student places the cat on their hip and closes the cage door with their free hand.	5	
5. The student carries the cat close to their body to its destination.	5	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

**“Cat Stretch”
(Restraint of the Cat in Lateral Recumbency)**

Participant Name: _____ State: _____

Criteria	Points Possible	Points Earned
1. The student places the cat on an examination table.	6	
2. The student scruffs the cat with one hand and lifts it off of the table enough to grasp both hind legs with his/her other hand.	7	
3. The student lays the cat on its side with the hind legs stretched rearward.	6	
4. The student spoke to the patient in a calm and affectionate manner during the procedure.	6	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Restraint of the Dog for Cephalic Venipuncture

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student places a noose leash on the dog.	4	
2. The student restrains the dog in sternal recumbency.	4	
3. The student stands on the dog's right side; wrapping his/her right arm around the dog's neck.	4	
4. The student holds the dog's left forelimb with elbow in the palm of his/her hand; extend the limb forward toward the person performing the procedure.	4	
5. With the elbow of the dog in his/her palm, the student rotates his/her thumb up so it is on top of the limb at the bend of the elbow.	5	
6. The student occludes the vessel with the thumb, rotates the thumb laterally.	4	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Applying a Commercial Dog Muzzle

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student places the dog in sitting or sternal position on exam table or floor.	5	
2. The student comes from behind the dog's head with the muzzle in one hand.	5	
3. The student brings the muzzle up to the dog's face and slips it on while grasping the strap with the other hand.	5	
4. The student secures the muzzle.	5	
5. The student checks for proper fit (one finger inserted under the strap).	5	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Applying a Gauze Dog Muzzle

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student places the dog in sitting or sternal position on exam table or floor.	4	
2. The student obtains a roll of 1 inch or 2 inch gauze.	2	
3. The student makes a loop in the gauze and approaches the dog from behind.	4	
4. The student places the loop on the dog's face with the tie on top.	5	
5. The student quickly tightens the loop, and then crosses the ends under the dog's face.	5	
6. The student brings the ends back behind the dog's head under the ears and ties in a quick-release bow.	5	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Restraint of the Dog for Jugular Venipuncture

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student places a noose leash on the dog.	6	
2. The student places dog in sternal position.	6	
3. The student holds the head up under the jaw, away from the chest (can be achieved by cupping hand underneath the muzzle and by pushing the head up toward the ceiling.)	7	
4. The student's other hand grasps the front legs and extends them over the end of the table.	6	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Restraint of a Small Dog in Lateral Recumbency

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student puts a noose leash on the dog.	4	
2. The student places the dog in the standing position.	4	
3. The student places his/her right arm across the dog's neck and reaches between the front legs to grasp the dog's right forelimb in right hand.	4	
4. The student places left arm over the dog's back and reaches for the dog's right rear limb; just proximal to the hock.	4	
5. With the dog's body close, the student gently lifts the limbs while allowing the dog's body to move to the table; the dog should be on its right side.	5	
6. The student allows the dog to relax for a couple seconds, not releasing the grasp on the limbs.	4	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Removing a Dog from a Cage or Kennel

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student places a leash in one hand with a large loop open and ready to place over the dog's head.	5	
2. The student opens the cage door enough to slip the hand holding the leash into the cage.	5	
3. The student slips the leash over the neck of the dog and gently tightens the leash around the neck.	5	
4. The student opens the door and allows the dog to exit the cage.	5	
5. The student keeps the dog to their side while maintaining a slight tension on the leash.	5	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Restraint of the Dog for Venipuncture of the Lateral Saphenous Vein

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student places a noose leash on the dog.	6	
2. The student restrains the dog in lateral recumbency.	6	
3. The student uses left hand to hold the limb tightly in the area just distal to the stifle, which will occlude the vein.	7	
4. The student holds the dog where the vein is visualized; venipuncture can now begin.	6	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Restraint of the Dog in Sternal Recumbency

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student puts a noose leash on the dog.	5	
2. The student begins with the dog sitting.	5	
3. The student places one arm around the dog's neck and places the other arm around the dog's back to grasp the forelimbs.	5	
4. The student pushes the dog's back with his/her body to encourage the dog to lie down.	5	
5. The student positions the dog so that head can be examined.	5	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Haltering Cattle

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student places crown piece of halter over ears, then slips nose through nosepiece.	6	
2. The student properly adjusts the halter such that the nose band crosses over bridge of nose halfway between the nostrils and eyes.	7	
3. The student ensures that the adjustable portion of the nose band is under the chin, not across the bridge of the nose.	6	
4. The student keeps the standing end or lead rope portion on the left side of the cow.	6	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Haltering a Horse

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. Without quick movements and loud noises, the student properly approaches the patient at a 45 degree angle to the patient's left shoulder.	4	
2. The student places end of the lead rope over the horse's neck and passes sufficient length of lead to form a handheld loop around the horse's neck.	4	
3. Holding the handheld loop in their right hand, with their left hand, the student slipped the nose-band of the halter over the nose.	4	
4. With their right hand under the horse's neck, the student passes the crown strap over the head and behind the ears and attaches the end to the appropriate place on the halter.	4	
5. The student snaps the end of the lead to the lead ring of the halter and undrapes the lead rope from the horse's neck.	4	
6. The student adjusts the halter so it is snug enough that the nose piece could not fall over the end of the nose, but not so tight that the halter cut or rubbed the horse or restricted jaw movement or breathing.	5	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Tying a Bowline Knot

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student makes a loop in the long end of the rope such that the short end of the rope overlaps the long end.	5	
2. The student passes the short end of the rope up through the loop.	5	
3. The student reaches under the long end of the rope and grasps the short end such that it wraps around the long end.	5	
4. The student passes the short end of the rope back through the loop in the opposite direction of the first pass.	5	
5. The student tightens the knot by pulling on both long and short ends.	5	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Tying a Double Half Hitch Knot

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student passes the rope around the post.	4	
2. The student passes the short end over and under the long end.	4	
3. The student passes the short end through the loop.	4	
4. The student pulls the rope tight.	4	
5. The student passes the short end over and under the long end, forming a loop.	5	
6. The student passes the short end up through the loop and pulls it tight.	4	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Tying a Half Hitch

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student places the rope over a pole or tie area.	6	
2. The student passes the short end of the rope over and under the long end.	7	
3. The student passes the short end through the loop.	6	
4. The student pulls the loop tight.	6	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Tying a Reefer's Knot

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student places the rope over a pole or tie area.	6	
2. The student passes the short end over and under the long end.	7	
3. The student makes a fold or bight in the short end and passes it over and under the long end.	6	
4. The student pulls securely on the long end and loop of the short end.	6	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Tying a Square Knot

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student takes one piece of rope and passes the right end over and under the left end.	6	
2. The student passes the “new” right end under and over the “new” left end; or the student passes the “new” left end over and under the “new” right end.	7	
3. The student pulls securely on both ends.	6	
4. The student unties the knot by pushing the opposite ends together.	6	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Placing a Tail Tie

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student lays the rope over the tail at the tip of the tail bone.	5	
2. The student folds all the tail hairs up over the rope.	5	
3. The student passes the short end of the rope behind the tail, and makes a fold or bight in it.	5	
4. The student passes the fold or bight over the folded tail and under the rope, which is looped around the tail.	5	
5. The student pulls tight.	5	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Building a Temporary Rope Halter for a Cow

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student loops the rope around the cow's neck.	5	
2. The student ties a bowline to secure the loop.	5	
3. The student folds the long end of the rope through the neck loop.	5	
4. The student passes the bight or loop over the bridge of the cow's nose.	5	
5. The student secures the second loop by tying a second knot at the throat latch.	5	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Handling and Restraining Practicum**

Restraint of a Rabbit

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student approaches the rabbit calmly and quietly.	5	
2. The student scruffs the rabbit with one hand while gently lifting the front end.	5	
3. The student's other hand immediately reaches under the hind limbs and holds them (not allowing the hind limbs to dangle).	5	
4. The student rests the rabbit's body on the arm with the hand holding the hind limbs.	5	
5. The scruffing hold is released and the hand is moved to hold the elbow of the opposite arm..	5	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Clinical Procedures Practicum**

Administering Aural Medication

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student applies gloves.	2	
2. The student cleans ears.	3	
3. The student successfully administered the medication into the ear canal without contamination of the applicator tip.	4	
4. The student applies proper amount of medication into the ear as noted by the veterinarian.	3	
5. The student removes the dispenser from the ear.	3	
6. The student massages the base of the outside of the ear canal causing a swishing sound from the medication moving around in the ear canal.	4	
7. The student wipes any solution that may have leaked onto the outside of the ear flap or hair.	3	
8. The student disinfects the medication dispenser with alcohol and places in appropriate area.	3	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Clinical Procedures Practicum**

Administering an Intramuscular Injection

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student places one hand with the fingers located medially along the middle of the femur. The thumb is placed on the lateral aspect of the mid-thigh.	4	
2. The student rubs an alcohol saturated cotton ball over the injection site.	4	
3. The student inserts the needle cranially and behind the femur between the stifle and hip joint.	4	
4. The student directs the needle through the skin and in to muscle mass.	4	
5. The student aspirates the plunger on the syringe; if no blood is noted, inject the substance slowly.	3	
6. The student withdraws the needle and places in the sharps container.	3	
7. The student massages the area where the injection was given and praises the patient.	3	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Clinical Procedures Practicum**

Administering Ophthalmic Medication

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student wipes any discharges from the patient's eye using a gauze sponge.	3	
2. The student opens the end of the ophthalmic medicine and holds in one hand.	3	
3. The student, using the free hand, uses the index finger and thumb to pull the upper and lower lids apart to open the eye. a. The student's thumb pulls the lower lid down and the index finger pulls the upper lid upward. b. The student's other finger may rest on the head of the animal.	4	
4. The student gently tilts the head upward.	3	
5. The student applies the drops or ointment gently into the eye, counting each drop and applying the proper amount.	3	
6. The student applies the ointment over a thin layer on the lower lid.	3	
7. The student releases the eyelids.	3	
8. The student allows the animal to blink to move the medication throughout the eye.	3	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Clinical Procedures Practicum**

Administering a Subcutaneous Injection

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student lifts the skin between the shoulder blades using the thumb and forefinger of one hand. Form a triangle or tent with the skin.	4	
2. The student wipes the area with an alcohol-soaked cotton ball.	3	
3. The student uses the other hand to insert the needle into the skin at the base of the tent or triangle parallel to the body.	3	
4. The student releases the skin once the needle is placed.	3	
5. The student uses their free hand to palpate the needle below the skin to check for accurate placement, noting the needle is not through the skin.	4	
6. The student aspirates the end of the plunger, looking for any signs of blood entering the syringe; if no blood enters the syringe, administer the injection.	3	
7. The student withdraws the needle and places in the sharps container.	3	
8. The student rubs the injection site with one hand and praises the patient.	2	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Clinical Procedures Practicum**

Administering Topical Medication

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student cleans area as necessary.	4	
2. The student uses a tongue depressor to transfer an amount of topical medication if the container is for multiple doses.	4	
3. The student applies the ointment onto the area in a circular motion, starting at the center of the wound and gently working outward.	5	
4. The student does not contaminate the medication by touching items that touched the animal.	4	
5. The student separates hair from skin and applies as directed.	4	
6. The student cleans the area and puts items away.	4	
TOTAL POINTS	25	

Judge's Signature

Date

Veterinary Science Clinical Procedures Practicum

Bandage Application

Participant Name: _____ State: _____

Criteria	Points Possible	Points Earned
1. The student applies a strip of 1" or 2" tape along the cranial aspect of a limb and one strip on the caudal aspect of a limb to prevent slipping; tape extends beyond the end of the limb.	2	
2. The student applies gauze pad on wound.	1	
3. The student applies primary layer using cotton roll by applying distally to the end of the area and then proximally to cover the entire surface; apply cotton at slight 45-degree angle. Wrap is not too tight, cutting off circulation.	2	
4. The student applies the cotton roll smoothly and evenly; preventing wrinkling.	1	
5. The student applies each layer of cotton so that it overlaps the previous layer.	1	
6. The student applies gauze roll as secondary later distally to the end of the area and then proximally to cover the entire surface; gauze is not too tight, cutting off circulation.	2	
7. The student applies the gauze at a slight 45-degree angle.	1	
8. The student applies the gauze layer smoothly and evenly, preventing wrinkling.	1	
9. The student applies each layer of gauze so that it overlaps the previous layer.	1	
10. The student applies desired amount with a slight extension beyond the end of the primary layers.	1	
11. The student applies the vet wrap tertiary layer by applying distally to the end of the area and then proximally to cover the entire area.	2	
12. The student applies the vet wrap at a slight 45-degree angle.	1	
13. The student applies the vet wrap smoothly and evenly, preventing wrinkling.	1	
14. The student applies each layer of vet wrap so that it overlaps the previous layer.	1	
15. The student applies to desired amount with the edges of the bandages extending slightly beyond the secondary layer.	1	
16. The student applies 1" or 2" adhesive tape to the proximal end and the distal end of the bandage edges; half of the tape layer is attached to the bandage and half of the tape layer is attached to the hair.	2	
17. The student places a small amount of tape along the last edge of the vet wrap at the end of the bandage opening.	2	
18. The student checks the patient's toes for swelling and temperature.	2	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Clinical Procedures Practicum**

Bandage Removal

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student works from the proximal end to the distal end of the bandage.	3	
2. The student places the long, blunt blade of the bandage scissors against the skin and slightly under the bandage edge.	3	
3. The student keeps the blade flat against the skin and at end raised slightly upward in contact with bandage.	3	
4. The student places bandage layers between scissor blades.	3	
5. The student begins cutting proximally; peeling the bandage layers away from patient using a firm motion.	3	
6. The student unpeels or cuts layers moving toward the distal portion of the bandage.	3	
7. The student gently removes each layer of bandage.	3	
8. The student notifies the veterinarian when bandage has been removed.	2	
9. The student cleans up work area.	2	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Clinical Procedures Practicum**

Fecal Flotation

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student selected about ¼ teaspoon of feces and placed it into a vial.	3	
2. The student added enough flotation solution to fill the vial about half full.	3	
3. The student mixed the feces into solution with an applicator stick (or equivalent) until no large fecal particles remained and strained the mixture into a second vial.	3	
4. The student filled the vial with more solution until there was a visible meniscus at the top.	3	
5. The student placed a cover slip on top of the vial.	3	
6. The student allowed the vial to sit undisturbed for 10-15 minutes.	3	
7. The student carefully removed the cover slip without tilting it and placed it on a microscope slide.	3	
8. The student placed the slide on a microscope and examined the area of the slide under the cover slip and noted and recorded any parasitic material found.	4	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Clinical Procedures Practicum**

Filling a Syringe

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student determines the drug or vaccine and amount to be placed in the syringe.	2	
2. The student selects the proper-sized syringe, needle length and gauge.	2	
3. The student prepares a label with the drug or vaccine name, amount to be withdrawn, date, patient name and veterinary assistant's initial.	2	
4. The student places the label on the distal barrel of the syringe.	2	
5. The student prepares a cotton ball saturated with alcohol.	2	
6. The student places the cotton ball on the top of the vial and wipes the rubber stopper area.	2	
7. The student places the vial upside down in one hand with the fingers curling around the vial securely.	2	
8. The student uncaps the needle and inserts the needle into the rubber top of the vial.	2	
9. The student withdraws the proper volume.	3	
10. The student removes the needle from the vial.	2	
11. The student gently taps or snaps the edge of the syringe to remove an air bubbles, or slightly expel the air by pushing the end of the plunger.	2	
12. The student recaps the needle.	2	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Clinical Procedures Practicum**

Prepare a Gram-Stained Slide

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student selected a bacterial sample by touching a sterile wire or loop to one colony on an agar plate.	2	
2. The student mixed the sample on a microscope slide with a drop of water or saline.	2	
3. The student circled the sample droplet on the slide with a wax pencil to help identify the area after staining.	2	
4. The student allowed the slide to air dry.	2	
5. The student heat fixed the slide by passing it through a flame 2-3 times, specimen side up.	2	
6. The student held the slide over the sink or placed it on a rack over the sink, flooded the smear with crystal violet, and let stand for one minute.	2	
7. The student rinsed the smear briefly with water.	1	
8. The student held the slide over the sink and flooded the smear with Gram's iodine solution and let stand for one minute.	2	
9. The student rinsed the smear briefly with water.	1	
10. The student washed the smear with decolorizer until no more purple color washed off (5-10 seconds).	2	
11. The student held the slide over the sink and flooded the smear with safranin and let stand for one minute.	2	
12. The student rinsed the smear briefly with water.	1	
13. The student allowed the slide to air dry or gently blotted it dry between paper towels.	2	
14. The student mounted the slide on the microscope and focused on the smear using the oil immersion lens.	2	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Clinical Procedures Practicum**

Use of a Microscope

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student removes the plastic cover from the microscope; the arm of the microscope should face the user.	2	
2. The student plugs in the microscope and turns on the power source including the light.	2	
3. The student places a slide on the stage of the microscope, securing it in place.	2	
4. The student places the projection lens on a low power.	2	
5. The student uses the adjustment knob to lower the objective power while looking through the eyepiece.	2	
6. The student looks at the stage through the eyepiece while focusing the slide; adjusts the focus accordingly; raises the objective arm away from the slide when complete.	3	
7. The student applies a drop of immersion oil into the center of the slide specimen if using the oil immersion objective lens.	2	
8. Lower the immersion objective slowly into the immersion oil.	2	
9. The student slowly adjusts the focus knob while looking in the eyepiece.	2	
10. When complete, the student raises the objective arm away from the slide.	2	
11. The student removes the slide from the microscope stage.	2	
12. The student uses a kim wipe or lens paper piece to gently cleanse the objective.	2	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Clinical Procedures Practicum**

Open a Gown and Gloves

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student selected the appropriate gown size.	3	
2. The student selected the appropriate glove size.	3	
3. The area where the gown and gloves were placed was dry and level.	3	
4. The gown is opened without contamination and the flaps are opened in the correct order.	4	
5. The student checked the chemical indicator to ensure sterility.	4	
6. The gloves are opened without contamination.	4	
7. The student tied or assisted with tying the surgery gown aseptically.	4	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Clinical Procedures Practicum**

Opening a Surgery Pack

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student placed the surgery pack on a clean, dry surface.	5	
2. The student removed or tore the tape securing the package.	5	
3. The student opened the flaps in the correct order.	5	
4. The student opened the pack without contamination.	5	
5. The student stepped away so the surgeon or scrub nurse could complete the opening of the pack.	5	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Clinical Procedures Practicum**

Prepare a Surgical Pack for Sterilization

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student gathered the appropriate instruments and instrument pan if applicable.	4	
2. The student gathered the appropriate linen supplies if applicable.	4	
3. The student selected the appropriate packaging material and chemical indicator.	4	
4. The student assembled the pack correctly by following the instructions on the checklist or recipe.	5	
5. The student appropriately selected and placed the chemical indicator.	4	
6. The student appropriately selected and utilized packaging material.	4	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Clinical Procedures Practicum**

Prescription Filling

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student reads and interprets prescription.	5	
2. The student selects the correct drug and concentration.	4	
3. The student places the pill counting tray on the pharmacy counter with the channel to the left and the open plate in front of him/her.	1	
4. The student pours the medication tablets or capsules onto the tray plate.	1	
5. The student opens the channel cover.	1	
6. The student uses a spatula or tongue depressor to push groups of tablets or capsules into the channel.	1	
7. When the student has counted the desired amount of medication, he/she closes the channel cover and lift tray to place the channel spout into the medicine vial or container.	5	
8. The student tilts the tray to return the unused medicine into the stock bottle.	1	
9. The student places the closed vial on the counter.	1	
10. The student appropriately fills out label with prescription information.	5	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Clinical Procedures Practicum**

Removal of Sutures

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student clearly visualized and inspected the incision site.	5	
2. If there were problems with the incision site, the student informed the veterinarian.	5	
3. If there were no problems with the incision, the student removed the sutures.	5	
4. The student used the correct tool to remove the sutures.	5	
5. The student did not cause unnecessary harm or discomfort to the patient.	5	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Clinical Procedures Practicum**

Collect a Sample for Dermatophyte Culture and Inoculate Dermatophyte Culture Media

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student identified a suspected dermatophyte lesion.	4	
2. The student cleansed the area with 70% alcohol on a cotton ball.	4	
3. The student obtained a small scraping of superficial debris and hair from the margin of the lesion using a sterile scalpel blade and forceps, or plucked a sample of hair from the margin of the lesion using hemostats.	5	
4. The student inoculated the culture media by placing the sample slightly below the surface of the media.	4	
5. The student left the lid to the tube slightly open.	4	
6. The student allowed the culture to incubate at room temperature.	4	
TOTAL POINTS	25	

Judge's Signature

Date

**Veterinary Science
Clinical Procedures Practicum**

Surgical Preparation

Participant Name: _____ **State:** _____

Criteria	Points Possible	Points Earned
1. The student applied antiseptic scrub to the site.	4	
2. The student prepped the site with a clean surgical sponge beginning at the incision site and worked toward the edges.	4	
3. The student discarded the sponge once it reached the edge of the clipped area.	4	
4. The student did not bring the sponge back to the incision site once it was moved away from the incision site.	4	
5. The student wiped the site with a rinse solution using a clean surgical sponge following the same pattern as when scrubbing with the antiseptic.	4	
6. The student repeated the scrub and rinse a minimum of 3 times or until the final rinse sponge was clean.	5	
TOTAL POINTS	25	

Judge's Signature

Date

Veterinary Science Team Activity Rubric 600 points

Non-verbal – 100 points						
Indicators	Very strong evidence skill is present 5-4	Moderate evidence skill is present 3-2	Strong evidence skill is not present 1-0	Points Earned	Weight	Total Score
A. Attention (eye contact)	<i>Eye contact constantly used as an effective connection.</i> Constantly looks at the entire audience (90-100% of the time).	<i>Eye contact is mostly effective and consistent.</i> Mostly looks around the audience (60-80% of the time).	<i>Eye contact does not always allow connection with the speaker.</i> Occasionally looks at someone or some groups (less than 50% of the time).		X 10	
B. Mannerisms	<i>Does not have distracting mannerisms that affect effectiveness.</i>	<i>Sometimes has distracting mannerisms that pull from the presentation.</i>	<i>Has mannerisms that pull from the effectiveness of the presentation.</i>		X 5	
C. Gestures	<i>Gestures are purposeful and effective.</i> Hand motions are expressive, and used to emphasize talking points. Great posture (confident) with positive body language.	<i>Usually uses purposeful gestures.</i> Hands are sometimes used to express or emphasize. Occasionally slumps; sometimes negative body language.	<i>Occasionally gestures are used effectively.</i> Hands are not used to emphasize talking points; hand motions are sometimes distracting. Lacks positive body language; slumps.		X 5	
Oral – 200 points						
A. Speaking without hesitation	<i>Speaks very articulately without hesitation.</i> Never has the need for unnecessary pauses or hesitation when speaking.	<i>Speaks articulately, but sometimes hesitates.</i> Occasionally has the need for a long pause or moderate hesitation when speaking.	<i>Speaks articulately, but frequently hesitates.</i> Frequently hesitates or has long, awkward pauses while speaking.		X 10	
B. Tone	<i>Appropriate tone is consistent.</i> Speaks at the right pace to be clear. Pronunciation of words is very clear and intent is apparent.	<i>Appropriate tone is usually consistent.</i> Speaks at the right pace most of the time, but shows some nervousness. Pronunciation of words is usually clear, sometimes vague.	<i>Has difficulty using an appropriate tone.</i> Pace is too fast; nervous. Pronunciation of words is difficult to understand; unclear.		X 10	
C. All team members participated	<i>All team members took an active role in the presentation.</i>	<i>Three team members took an active role in the presentation.</i>	<i>Two or less team members took an active role in the presentation.</i>		X 20	
Content – 300 points						
A. Role accuracy	<i>Fully accurate in defining roles of the veterinary team.</i>	<i>Somewhat accurate in defining roles of the veterinary team.</i>	<i>Inaccurately defines the roles of the veterinary team.</i>		X 20	
B. Veterinary process research	<i>Demonstrates researched knowledge of the veterinary process.</i>	<i>Demonstrates somewhat researched knowledge of the veterinary process.</i>	<i>Does not demonstrate researched knowledge of the veterinary process.</i>		X 20	
C. Q&A: Demonstrates knowledge of topic	<i>Answer shows thorough knowledge of the subject of the speech.</i> Supports answer with strong evidence.	<i>Answer shows some knowledge of the subject.</i> Some evidence, but lacking in strength.	<i>Answer shows little knowledge of the subject.</i> Evidence is lacking to support the answer.		X 10	
D. Q&A: Speaking unrehearsed	<i>Speaks unrehearsed with comfort and ease.</i> Is able to speak quickly with organized thoughts and concise answers.	<i>Speaks unrehearsed mostly with comfort and ease, but sometimes seems nervous or unsure.</i> Is able to speak effectively, has to stop and think, and sometimes gets off focus.	<i>Shows nervousness or seems unprepared when speaking unrehearsed.</i> Seems to ramble or speaks before thinking.		X 10	
TOTAL						

Judge's Signature _____

Date _____

Appendix A: AFNR Career Cluster Content Standards

	Performance Measurement Levels	Event Activities Addressing Measurements	Related Academic Standards
CS.02.03. Performance Indicator: Professional Growth: Develop awareness and apply skills necessary for achieving career success.			Language Arts: 12 Social Studies: 4a
	CS.02.03.01.a. Explore various career interests/options.	Scenario Questions; Team Activity	
	CS.02.03.03.a. Identify the skills required for various careers.	Scenario Questions; Team Activity	
CS.02.04. Performance Indicator: Mental Growth: Demonstrate the effective application of reasoning, thinking and coping skills.			Math: 6C Science: A4 Language Arts: 4 and 8
	CS.02.04.01.c. Demonstrate critical and creative thinking skills while completing a task.	Team Activity	
CS.03.01. Performance Indicator: Communication: Demonstrate oral, written and verbal skills.			Language Arts: 4, 5 and 12
	CS.03.01.03.c. Make effective business presentations.	Team Activity	
CS.06.02. Performance Indicator: Develop a plan to maintain and improve health, safety and environmental compliance and performance.			Science: F1, F4 and F5 Social Studies: 9d
	CS.06.02.01.a. Use proper safety practices/personal protective equipment.	Handling and Restraining Practicum; Clinical Procedure Practicum	
CS.07.01. Performance Indicator: Apply safety/health practices to AFNR worksites.			Science: F1 and F5
	CS.07.01.01.b. Use appropriate personal protective equipment for a given task.	Handling and Restraining Practicum; Clinical Procedure Practicum	
CS.07.04. Performance Indicator: Assess workplace safety.			Science: F5
	CS.07.04.01.a. Research applicable regulatory and safety standards (e.g., MSDS, bioterrorism).	Written Exam	
	CS.07.04.02.a. Handle chemicals and equipment in a safe and appropriate manner.	Clinical Procedure Practicum	

CS.08.01. Performance Indicator: Evaluate and select the appropriate tool to perform a given task.			
	CS.08.01.01.c. Use tools and equipment appropriately to complete a specific task.	Identification; Handling and Re- straining Practicum; Clinical Procedures Practicum	
ABS.02.03. Performance Indicator: Apply appropriate management skills to organize a business.			Language Arts: 12 Social Studies: 7f
	ABS.02.03.02.a. Identify appropriate local, state, federal, international and industry regulations for AFNR businesses.	Written Exam; Scenario Questions	
	ABS.02.04.03.a. Explain the meaning and importance of employee relations, including communication.	Scenario Questions; Team Activity	
AS.02.01. Performance Indicator: Classify animals according to hierarchical taxonomy and agricultural use.			Science: C3
	AS.02.01.02.a. Identify major animal species by common and scientific names.	Identification	
	AS.02.02.06.c. Explain the impact of animal body systems on performance, health, growth and reproduction.	Written Exam; Scenario Questions	
AS.02.03. Performance Indicator: Select animals for specific purposes and maximum performance based on anatomy and physiology.			Science: C5
	AS.02.03.01.a. Identify ways an animal's health can be affected by anatomical and physiological disorders.	Written Exam; Scenario Questions	
AS.03.01. Performance Indicator: Prescribe and implement a prevention and treatment program for animal diseases, parasites and other disorders.			Science: C4, F1 and F5
	AS.03.01.01.b. Perform simple health-check evaluations on animals.	Clinical Procedures Practicum; Team Activity	
	AS.03.01.02.a. Identify common diseases, parasites and physiological disorders that affect animals.	Identification	
	AS.03.01.03.a. Explain characteristics of causative agents and vectors of diseases and disorders in animals.	Written Exam; Scenario Questions	
	AS.03.01.04.b. Prepare animals, facilities and equipment for surgical and nonsurgical veterinary treatments and procedures.	Clinical Procedures Practicum	

AS.05.01. Performance Indicator: Evaluate the male and female reproductive systems in selecting animals.		Science: C1 and C3
	AS.05.01.01.a. Explain the male and female reproductive organs of the major animal species.	Written Exam; Scenario Questions
AS.05.03. Performance Indicator: Apply scientific principles in the selection and breeding of animals.		Math: 6C Science: A4, C2 and E2
	AS.05.03.01.a. Explain genetic inheritance in agricultural animals.	Written Exam; Scenario Questions
	AS.05.03.02.a. Define natural and artificial breeding methods.	Written Exam; Scenario Questions
AS.06.01. Performance Indicator: Demonstrate safe animal handling and management techniques.		Science: C6
	AS.06.01.01.c. Interpret animal behaviors and execute protocols for safe handling of animals.	Handling and Restraining Practicum
	AS.06.01.02.a. Explain the implications of animal welfare and animal rights for animal agriculture.	Scenario Questions
AS.06.02. Performance Indicator: Implement procedures to ensure that animal products are safe.		Science: F1 and F5
	AS.06.02.01.a. Identify animal production practices that could pose health risks or are considered to pose risks by some.	Scenario Questions
AS.07.01. Performance Indicator: Design animal housing, equipment and handling facilities for the major systems of animal production.		Science: C6 and F6
	AS.07.01.02.a. Identify equipment and handling facilities used in modern animal production.	Identification
AS.07.02. Performance Indicator: Comply with government regulations and safety standards for facilities used in animal production.		Science: F5
	AS.07.02.01.a. List the general standards (e.g., environmental, zoning, construction) that must be met in facilities for animal production.	Written Exam; Scenario Questions
AS.08.02. Performance Indicator: Evaluate the effects of environmental conditions on animals.		Science: C6 and F4
	AS.08.02.01.b. Describe the effects of environmental conditions on animal populations and performance.	Written Exam; Scenario Questions

Appendix B: Related Academic Standards

National academic standards for mathematics, science, English language arts and social studies related to this event are reported below. The statements are based on information in reports of the respective associations/organizations in the academic areas. Some adjustment of numbering was done to facilitate the process of alignment with the standards that have been developed in the pathways of the Agriculture, Food and Natural Resources (AFNR) Career Cluster.

The approach was to determine the presence of alignment between the content standards, expectations or thematic strands of the four academic areas and the performance indicators of the AFNR Standards. Supporting statements have been included to clarify content of the respective content standards, expectations or thematic strands. The statements were initially developed independently by the respective organizations and, therefore, are not parallel in wording and presentation. Occasionally minor editing was done to adjust the background or stem of a statement but not the statement itself.

Mathematics

6. Standard and Expectations: Problem Solving

6C. Apply and adapt a variety of appropriate strategies to solve problems.

Science

A. Content Standard: Science as an Inquiry

A4. Formulate and revise scientific explanations and models using logic and evidence.

C. Content Standard: Life Science

C1. The cell

C2. Molecular basis of heredity

C3. Biological evolution

C4. Interdependence of organisms

C5. Matter, energy and organization in living systems

C6. Behavior of organisms

E. Content Standard: Science and Technology

E2. Understanding about science and technology

F. Content Standard: Science in Personal and Social Perspectives

F1. Personal and community health

F4. Environmental quality

F5. Natural and human-induced hazards

F6. Science and technology in local, national and global challenges

English Language Arts

4. Students adjust their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes.

5. Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.

8. Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge.

12. Students use spoken, written and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion and the exchange of information).

Social Studies

4. Thematic Strand: Individual Development and Identity
 - 4a. articulate personal connections to time, place and social/cultural systems;
7. Thematic Strand: Production, Distribution and Consumption
 - 7f. compare how values and beliefs influence economic decisions in different societies;
9. Thematic Strand: Global Connections
 - 9d. analyze the causes, consequences and possible solutions to persistent, contemporary and emerging global issues, such as health, security, resource allocation, economic development and environmental quality;